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BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

Arizona Corporation Commission

DOCKETED

DEC 23 2014

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IN THE MATTER OF THE APPLICATION)
OF MOHAVE ELECTRIC COOPERATIVE,)
INC FOR APPROVAL OF ITS 2015)
RENEWABLE ENERGY STANDARD AND)
TARIFF PLAN AND TARIFF.)

DOCKET NO. E-01750A-14-0251

DECISION NO. 74879

ORDER

Open Meeting
December 18, 2014
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Mohave Electric Cooperative ("MEC" or "Company") is engaged in providing electric service within portions of Arizona, pursuant to authority granted by the Arizona Corporation Commission ("ACC" or "Commission").

Background

2. On July 1, 2014, MEC filed an application for approval of its 2015 Renewable Energy Standard and Tariff ("REST") Plan.

3. MEC is a rural electric distribution cooperative headquartered in Bullhead City, Arizona, providing electric service to approximately 32,830 members in Mohave, Coconino, and Yavapai counties. MEC owns and operates 112 miles of 69 kV sub-transmission lines and 1,405 miles of distribution lines. MEC employs approximately 79 employees and provides service to 26 meters per mile of line in its service territory.

1 4. MEC is a partial requirements wholesale power customer of the Arizona Electric
2 Power Cooperative, Inc. (“AEPCO”) and purchases additional wholesale resources from other market
3 providers.

4 5. Commission Decision No. 74161 (October 25, 2013) approved MEC’s Rest Plan for
5 2014. The 2015 REST Plan retains the significant features of the 2014 REST Plan with some
6 modifications.

7 **MEC’s REST Plan**

8 6. The MEC REST Plan would continue the eight components from the 2014 Plan. The
9 components are the following:

- 10 a. Voluntary Renewable Energy Program
- 11 b. Member Self-Directed Renewable Energy Program
- 12 c. SunWatts Residential and Commercial Incentive Program
- 13 d. Clean Renewable Energy Bonds – PV for Schools
- 14 e. SunWatts Large-Scale Program (In conjunction with AEPCO)
- 15 f. Analysis of Geothermal Resources
- 16 g. Distributed Generation Solar Installation
- 17 h. Community-based Projects

18 **Voluntary Renewable Energy Program**

19 7. MEC would continue to offer a voluntary program whereby participating customers
20 can purchase 50 kWh blocks of “green energy” at a cost of \$2.00 each. MEC is not proposing any
21 change to its Voluntary Renewable Energy Program Tariff for 2015, a copy of which is included in the
22 REST Tariffs section of the REST Plan application.

23 **Member Self-Directed Renewable Energy Program**

24 8. An MEC customer who pays more than \$25,000 annually in renewable energy
25 surcharge funds may apply to MEC to receive funds to install distributed renewable energy resources.
26 An eligible customer seeking to participate in this program would submit a written application to
27 MEC describing the renewable energy resource that it proposes to install and the projected cost of the
28 ...

1 project. MEC is not proposing any change to its Renewable Energy Customer Self-Directed Tariff for
2 2015, a copy of which is included in the REST Tariffs section of this REST Plan.

3 **SunWatts Residential and Commercial Incentive Program**

4 9. SunWatts is an incentive program that pays incentives to customers to install
5 photovoltaic ("PV"), solar water heating, or small wind turbine systems. Incentives would be made on
6 a first come, first served basis until funding is exhausted. Once a customer submits a reservation
7 form, no further reservation form will be accepted from that customer until the pending installation
8 has been completed and the rebate provided, or the reservation is voluntarily withdrawn.

9 10. To qualify for incentives, the combined generation capacity at the location is limited to
10 a maximum of 125% of the total connected load at the location and is limited to one installation per
11 service entrance for residential and commercial PV and wind turbine systems. PV and small wind
12 projects larger than 50 kW are not covered by REST incentives and will be dealt with on a case-by-
13 case basis through negotiated contracts.

14 11. MEC currently pays \$0.35 per watt of installed nameplate capacity, up to 40% of the
15 total cost of the system. The dollar cap for PV and wind systems installed at a single location is
16 \$25,000 for both residential and commercial systems.

17 12. For 2015, MEC proposes to pay \$0.20 per watt of installed nameplate capacity. The
18 dollar cap for PV and wind systems installed at a single location is \$3,000 for residential and \$5,000 for
19 commercial systems.

20 13. MEC proposes that no incentive be paid for leased systems. Staff has recommended
21 that the same incentives be offered to all installed systems, regardless of leased or purchased status.

22 14. MEC will continue to provide rebates for residential solar water heating systems of
23 \$0.75 per kWh of energy saved during the system's first year of operation. Solar systems must be OG-
24 300 certified solar systems to be eligible for the SunWatts rebate. A list of OG-300 certified solar
25 systems is available at www.solar-rating.org. MEC will only pay rebates for systems which replace a
26 traditional electric water heater. In addition, the customer contribution to the cost of the solar water
27 heater project must be a minimum of 15 percent of the total project cost after accounting for and
28 ...

1 applying all federal and state incentives. Solar swimming pool heating systems are not eligible for the
2 SunWatts rebate.

3 15. MEC will continue to include Biomass, Biogas, Daylighting and Solar Space Cooling in
4 the SunWatts program at current incentive levels.

5 16. The proposed incentives are shown in Table 1 below.

6 **Table 1**
7 **Mohave Electric Cooperative**
8 **Proposed 2015 REST Incentives**

System	Incentive	Cap or Limit
Residential and Small Commercial PV or Wind up to 50 kW. Greater than 50 kW on case-by-case incentive.	\$0.20/Watt	\$3,000 residential and \$5,000 per commercial system
Solar Water Heating if replacing traditional electric.	\$0.75/kWh saved, based on first year of operation	Customer contributes at least 15% of system cost
Daylighting	\$0.20/kWh saved, based on first year of operation	
Biomass/Biogas Electric Generation	\$0.06/kWh over 10 years	
Biomass/Biogas CHP Electric	\$0.035/kWh over 10 years	
Biomass/Biogas CHP Thermal	\$0.018/kWh over 10 years	
Biomass/Biogas Thermal	\$0.015/kWh over 10 years	
Biomass/Biogas Cooling	\$0.032/kWh over 10 years	
Solar Cooling	\$0.129/kWh over 10 years	

23 **Clean Renewable Energy Bonds -- PV for Schools**

24 17. All eligible schools in MEC's service territory have received PV systems under the
25 approved 2010 and 2011 REST Plans. The Commission had previously authorized MEC to provide
26 these systems at no cost to the schools by utilizing up to \$1,000,000 of internal MEC funds repayable
27 with REST funds over ten years at the Clean Renewable Energy Bond ("CREB") rate. See Decision
28 No. 72092.

1 18. MEC still intends to apply for multi-year funding of its PV for Schools program by
2 application for CREBs or similar Federal and State funding programs in order to repay the internal
3 funds advanced for the projects, when and if funding is available for such purposes. At the present
4 time no funding of this type is available; however, once Federal or State funds become available, MEC
5 would evaluate the CREBs terms and conditions, including the ten year interest rate, and deploy
6 CREBs funding in the best interest of the REST program.

7 **SunWatts Large-Scale Program (in conjunction with AEPCO)**

8 19. The SunWatts Large-Scale Program has two components: a Purchase Power Contract
9 Program and a Generating Program. The Purchase Power Contract Program is administered by
10 AEPCO on behalf of its member cooperatives. MEC will continue to participate with AEPCO and
11 its member cooperatives on projects that are determined to be beneficial and help in meeting the
12 REST Plan requirements.

13 **Analysis of Geothermal Resources**

14 20. MEC has partnered with Navopache Electric Cooperative, Inc. ("NEC") and retained
15 Black & Veatch, Consulting Engineers ("B&V"), to investigate the feasibility of developing
16 geothermal energy resources within each cooperative's service territory. B&V, along with
17 GeothermEx, Inc. of Richmond, California, evaluated literature in the public domain and information
18 provided by NEC to identify and characterize known thermal waters, heat flow, and geology.

19 21. GeothermEx used the data collected and evaluated to describe geothermal targets
20 within or near the two service territories, in terms of depth, host formations and, if possible, order-of-
21 magnitude estimates of generation potential. For the sites identified, preliminary estimates of land
22 status, access, proximity to transmission infrastructure and water availability will be determined. A
23 program of exploration and confirmation drilling, including costs and approximate timelines, has been
24 developed by GeothermEx.

25 22. GeothermEx and B&V have delivered their final report to the cooperatives, which
26 concluded that the potential for an initial 5 MW geothermal generation resource is feasible in both
27 service territories, with the NEC location having the highest probability for success. NEC has
28 initiated a grant application to the Department of Energy to fund exploratory drilling. MEC will

1 continue to monitor the progress of NEC and is prepared to partner with NEC in the development of
2 the geothermal resource once exploratory drilling indicates that the project will proceed to commercial
3 development. However, MEC has not budgeted any REST funds for this program for 2015.

4 23. MEC continues its Willcox Greenhouse Geothermal Project agreement with Sulphur
5 Springs Valley Electric Cooperative and AEPCO. The project provided 1,000,122 RECS to MEC in
6 2013.

7 **Distributed Generation Solar Installation**

8 24. MEC continues to explore development of a renewable energy generation project up
9 to 5 MW within the MEC service territory. MEC is considering a developer-based project, as well as
10 MEC's own development of a renewable energy project within its own load area. MEC has recently
11 executed agreements, including a non-disclosure agreement, for the development of a renewable
12 energy generation project that could be operational during the term of the 2015 REST Plan.

13 25. Funds allocated for this project can be utilized on any qualified renewable project
14 within MEC's Service Territory up to 5 MW, excluding renewable projects for which MEC has
15 another specific program under this REST Plan. REST funds can be used toward the cost of
16 renewable power to the extent such power costs exceed MEC's currently posted and Commission-
17 approved Annual Average Avoided Cost of power set forth in its Net Metering Service Tariff.

18 **Community-Based Programs**

19 26. MEC proposes to expand Community-based programs to a total budget of \$200,000
20 and to include the following:

21 **Habitat for Humanity/Community Services Program** - In the past MEC has partnered
22 with Habitat for Humanity to offer alternative energy options to low income housing in
23 MEC's service area. MEC's REST Plan budget allows for one project per year that would not
24 exceed \$25,000. In years where Habitat for Humanity does not designate an eligible low
25 income housing project under this program by July 1 of the year, MEC will select another
26 community-based nonprofit organization to receive the \$25,000 renewable energy project.

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1 **PV for Fire Stations Program** - MEC will select an eligible Fire Station in the service
2 territory for one PV project per year not to exceed \$50,000 or two Fire Stations for a PV
3 project not to exceed \$25,000 each.

4 **Golden Shores Community Center** - MEC has identified the non-profit senior nutrition and
5 community center located in Golden Shores as a proposed location to receive a PV system not
6 to exceed \$50,000. MEC's membership includes a large number of seniors many of which are
7 low income. This facility provides resources and activities for those members.

8 **Mohave County Bullhead Justice Court** - MEC has selected the Mohave County Court
9 facility located in the service territory to receive a PV system not to exceed \$75,000.

10 27. In previous REST Plan years, MEC successfully facilitated federal American Recovery
11 and Reinvestment Act funding and private donations to enhance REST Plan approved community
12 projects. MEC will continue to pursue government and private donations for future projects under
13 this program.

14 **Educational Grant Program**

15 28. One school per year, in MEC's service area, would be offered an educational grant of
16 no more than \$5,000 for the development of renewable energy generation educational curricula for
17 the classroom.

18 **Administration and Advertising**

19 29. MEC advertises and promotes its REST programs in a variety of mediums including,
20 but not limited to, bill inserts, monthly newsletters, television, radio, and community events. MEC
21 will not use more than 15 percent of total surcharge funds for administration and advertising
22 expenses. At the end of each program year, unused funds will be carried over to fund activities and
23 programs in the following year.

24 30. MEC maintains information on its customer-driven programs on its website at
25 www.mohaveelectric.com. In coordination with the Grand Canyon State Electric Cooperative
26 Association, MEC continues to support and participate in the Arizona Goes Solar website mandated
27 by the Commission, the administration of which is spearheaded by Arizona Public Service Company.

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1 **Request for Flexibility to Shift REST Funds between Programs**

2 31. MEC anticipates the incentive program is adequately funded for both 2014 and 2015.
3 No waiting list or backlog of incentive requests currently exists.

4 32. All programs will be available until the budget funds for the program are exhausted;
5 however, MEC also seeks Commission authorization to continue to be able to shift approved REST
6 Plan funds between programs, in order to increase budgets for programs in the 2015 Plan where
7 appropriate. MEC proposes that the conditions of shifting funds already included in MEC's 2013 and
8 2014 Plans would be continued for 2015.

9 33. These conditions include:

- 10 a. No more than 15% of a Program's approved budget may be affected by the shift.
- 11 b. MEC would notify Staff of any plan to shift funds no less than 60 days prior to
12 implementing the shift.
- 13 c. If Staff notifies MEC in writing that it opposed the shift of funds, no shift would
14 occur unless Mohave first secures a Commission order authorizing the shift.
- 15 d. Within 60 days following any funds shift, MEC would submit to Staff a revised
16 budget recognizing the shift of funds.

17 **Budget**

18 34. MEC has proposed the budget shown below in Table 2. The proposal for 2015 is
19 approximately \$1.16 million.

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Table 2
Mohave Electric Cooperative
2015 REST Plan Budget

Residential and Commercial Incentives	\$372,739
5 MW Distributed Generation-Solar	290,648
PV For Schools Loan Repayment	103,189
GO SOLAR Website	516
Solar Water Heating	18,000
Geothermal Resources-Willcox Greenhouse	29,544
Administration & Advertising	140,000
Educational Grants	5,000
Community Programs: Habitat for Humanity	25,000
Community Programs: Fire Stations	50,000
Community Programs: Golden Shores Community Center	50,000
Community Programs: Mohave County Bullhead Justice Court	75,000
Total Budget	\$1,159,636

Funding and Surcharge

35. MEC is proposing to reduce its REST surcharge rates for 2015 by about two thirds. Over the past two years, Mohave has accumulated a surplus of funds (\$3,545,753 forecasted for January 1, 2015) from the REST surcharge revenue collected. The proposed reduced rates are designed to maintain current budget levels for the existing programs by using past accumulated revenue along with revenue from expected collections with the amended rates. A copy of the proposed Tariff is included in the REST TARIFFS section of the filed REST Plan.

36. Staff has reviewed MEC's REST surcharge rates proposed to fund its annual budget for 2015 which are reduced from present rates. Rates are shown in Table 3 below. For simplicity, Staff has recommended that the rates be shortened to four decimal places. Expected revenue from customer classes, based on MEC's proposed rates, is shown in Table 4. The impact on typical customers is shown in Table 5. Staff's proposed rates would be expected to result in \$2,024 less total revenue than the rates proposed by MEC.

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Table 3
Mohave Electric Cooperative
Present and Proposed REST Surcharge Rates

Customer Class	Present		Mohave-Proposed		Staff-Proposed	
	Energy Rate	Monthly Cap	Energy Rate	Monthly Cap	Energy Rate	Monthly Cap
Residential	\$0.0095006	\$3.10	\$0.0032208	\$1.05	\$0.0032	\$1.05
Government & Agricultural	\$0.0009420	\$15.00	\$0.0003140	\$5.00	\$0.0003	\$5.00
Government & Agricultural \geq 3 MW	\$0.0009420	\$49.00	\$0.0003140	\$16.50	\$0.0003	\$16.50
Irrigation	\$0.0053714	\$49.00	\$0.0018088	\$16.50	\$0.0018	\$16.50
Small Commercial	\$0.0053714	\$49.00	\$0.0018088	\$16.50	\$0.0018	\$16.50
Large Power	\$0.0053714	\$49.00	\$0.0018088	\$16.50	\$0.0018	\$16.50
Non-Residential \geq 3 MW	\$0.0053714	\$147.00	\$0.0018088	\$49.50	\$0.0018	\$49.50
Highway	\$0.0095006	\$3.10	\$0.0032208	\$1.05	\$0.0032	\$1.05

Table 4
Mohave Electric Cooperative
2015 REST Funding from Surcharge

	Revenue	Average Charge	Cap Amount	Percent of Customers at Cap
Residential	\$375,543	\$0.52	\$1.05	74.43%
Government	\$4,201	\$0.64	\$5.00	10.83%
Irrigation	\$2,671	\$7.05	\$16.50	71.52%
Small Commercial	\$129,310	\$2.42	\$16.50	6.48%
Large Power	\$14,637	\$6.95	\$16.50	91.96%
Street Lighting	\$181	\$0.06	\$1.05	1.56%
Total	\$526,543			

Table 5
Mohave Electric Cooperative
REST Rate Effect on Typical Customers

Sample Customers	Estimated Typical kWh	Proposed REST Cost
Residential	1,000	\$1.05
Barber Shop / Hairstylist	1,750	\$3.17
Department Store	76,843	\$16.50
Mall (less tenants)	21,600	\$16.50
Retail Video Store	29,613	\$16.50
Large Hotel	21,970	\$16.50
Large Building Supply and Hardware	231,440	\$16.50
Motel	13,413	\$16.50
Large Office Building	64,160	\$16.50
Hospital	215,000	\$16.50
Supermarket	208,220	\$16.50
Convenience Store	28,840	\$16.50
School	74,233	\$5.00
Government Complex	37,423	\$5.00

Recommendations

37. Staff has recommended that MEC's proposed 2015 Renewable Energy Standard and Tariff Plan be approved as discussed herein.

38. Staff has recommended that MEC's Renewable Energy Standard Tariff rates and caps be reduced as proposed by Staff in Table 3.

39. Staff has recommended that MEC's proposed incentive amounts as shown in Table 1 be approved.

40. Staff has recommended that the same incentives be offered to all installed systems, regardless of leased or purchased status.

41. The Commission agrees with the points and concerns raised by Mohave Electric Cooperative, Incorporated regarding the continued inclusion of leased PV systems in its incentive programs, and concludes that it is in the public interest to approve the request of Mohave Electric Cooperative, Incorporated to exclude leased PV systems from eligibility for incentives under its 2015 REST Plan.

1 IT IS FURTHER ORDERED that the request of Mohave Electric Cooperative, Incorporated
2 to exclude leased PV systems from eligibility for incentives under its 2015 REST Plan is approved.

3 IT IS FURTHER ORDERED that Mohave Electric Cooperative shall file in Docket Control
4 a Renewable Energy Standard Tariff consistent with the Decision in this case within 15 days of the
5 effective date of the Decision.

6 IT IS FURTHER ORDERED that this Order shall become effective immediately.

7
8 **BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION**

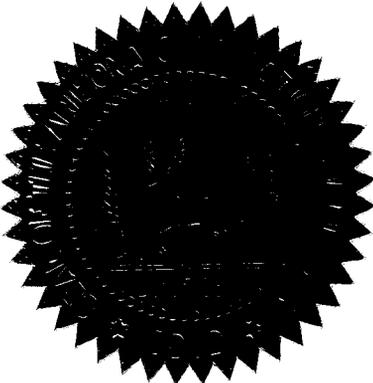
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11 COMMISSIONER

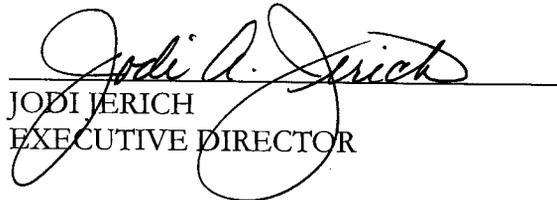
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15 IN WITNESS WHEREOF, I, JODI JERICH, Executive
16 Director of the Arizona Corporation Commission, have
17 hereunto, set my hand and caused the official seal of this
18 Commission to be affixed at the Capitol, in the City of
19 Phoenix, this 23rd day of December, 2014.

19 
20 JODI JERICH
21 EXECUTIVE DIRECTOR

22 DISSENT: _____

23 DISSENT: _____

24 SMO:JJP:sms\CHH

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1 SERVICE LIST FOR: Mohave Electric Cooperative, Inc.
2 DOCKET NO. E-01750A-14-0251

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